

Listing of Claims:

Please cancel claim 18.

Please amend claims 1, 3 and 14 as follows:

1. (Twice Amended) A method of differentiating primate embryonic stem cells into neural precursor cells, comprising the steps of:

(a) obtaining a primate embryonic stem cell culture,

(b) propagating the stem cells, wherein embryoid bodies are formed, and

(c) culturing the embryoid bodies in a medium containing an effective amount of fibroblast growth factor 2, wherein neural precursor cells are generated and wherein the neural precursor cells form ~~are characterized by~~ rosette formations.

2. (Cancelled)

3. (Twice Amended) The method of claim 1 further comprising the step of isolating the neural precursors by ~~differential enzymatic treatment and adhesion~~ wherein the treatment leads to the preferential detachment of ~~central neuroepithelial islands~~ rosette formations and the

preferential attachment of surrounding cells that are not in a
rosette formation.

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4. (Original) The method of claim 1 wherein the amount of fibroblast growth factor 2 in the medium of step (d) is between 10 and 20 ng/ml.

5. (Original) The method of claim 1 wherein the embryonic stem cell culture is a human embryonic stem cell culture.

6. (Original) The method of claim 1 wherein the culture of step (c) is at least 72% neural precursor cells.

7. (Original) The method of claim 6 wherein the percentage of neural precursor cells is at least 84%.

8. (Original) The method of claim 3 wherein the isolation procedure results in an enriched population of neural precursor cells, wherein at least 90% of the cells are neural precursor cells.

9. (Original) The method of claim 8 wherein at least 95% of the cells are neural precursor cells.

10. (Original) The method of claim 1 wherein the embryonic stem cell culture is selected from the group consisting of human ES cell lines H1, H9 and H9.2.

11. (Original) The method of claim 1 wherein the embryonic stem cells are propagated on a feeder layer of irradiated mouse embryonic fibroblasts.

12. (Cancelled)

13. (Original) The method of claim 1 wherein step (d) comprises culturing the embryoid bodies in a medium comprising insulin, transferrin, progesterone, putrescine, sodium selenite and heparin.

14. (Twice Amended) An isolated cell population comprising at least 72% neural precursor cells wherein the cells are form ~~characterized by~~ rosette formations.

15. (Original) The cell population of claim 14, wherein the population comprises at least 84% neural precursor cells.

16. (Original) The cell population of claim 15 comprising at least 90% neural precursor cells.

17. (Original) The cell population of claim 16 comprising at least 95% neural precursor cells.

18. (Cancelled)